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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/858,447	05/17/2001	Dominique Gagnon	15079-1 US GH/ch	2498

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EXAMINER	
CROSS, LATOYA I	

ART UNIT	PAPER NUMBER
1743	

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/858,447	GAGNON ET AL.	
	Examiner	Art Unit	
	LaToya I. Cross	1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 April 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) *12-20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This Office action is in response to Applicant's amendments filed on April 28, 2004. Claims 1-20 are pending. Claims 12-20 are withdrawn from consideration as being directed to non-elected subject matter.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,113,858 to Tang et al.

Tang et al disclose a monitor and method for continuously measuring concentrations of analyte in pool water. Tang et al disclose collecting a sample of pool water in a sampling cavity (80), allowing an indicator/reagent to react with the molecules in the pool water and reading the color intensity of the indicator with a light source and optical detector (col. 2, lines 55-67). Specifically, with respect to claim 1, Tang et al disclose collecting a pool water sample into the optical chamber (sampling cavity 80). A reagent (indicator material 79, 88) is added to the sampling cavity. The reagent is one that will change colors after reacting with ions in the pool water (col. 4, lines 46-60). The color intensity, from the reaction of the indicator with ions in the pool water, is read by the light source (62) and detector (92). The transmission intensity of the indicator is directly related to the concentration of ions in the pool water (col. 5, lines 13-15). The monitor is calibrated with known standard. The analytes to be determined include pH measurements and chlorine concentrations, as recited in claims 3 and 10 (col. 2, lines 13-16). With respect to claim 5, Tang et al teach using the information obtained from the light

source and detector to determine the amount of additional chemicals needed to balance the quality of the water, liquid or environment (col. 6, line 66 - col. 7, line 1. With respect to claim 7, Tang et al teaches that the monitor allows continuous (repeated) measurements of levels of chemicals in pool water to be determined. The reference further discloses a red LED (alarm) to inform the user when the levels of chemical need to be replenished. With respect to claims 4 and 11, Tang et al disclose that the monitoring is an automatic, continuous process that is run and controlled by a microprocessor (40). The microprocessor would serve as a computer to run the program necessary in carrying out the process.

Tang et al differ from the instant invention in that the reference does not specifically disclose calibrating the monitor with a sample of pool water that does not contain the indicator. However, Tang et al do teach using a series of known values corresponding to the known chemical concentrations that will be stored in the memory of the microprocessor (40). It would have been obvious to one of ordinary skill in the art to use the actual pool water as the calibration sample because such would assure that any differences in the color intensity taken when the indicator is present was actually due to the reaction of indicator with ions in the water and not some other factor. In using the pool water as the calibration sample, the accuracy of the test results can be authenticated.

With respect to claims 2 and 9, Tang et al do not specifically teach rinsing between steps, however, it would have been obvious to rinse the optical chamber between steps to make sure that no leftover indicator or other contaminants are present in the chamber when the tests are performed. In doing so, the possibility of false positives is alleviated.

Therefore, for the reasons set forth above, Applicant's claimed invention is deemed to be obvious, within the meaning of 35 USC 103 in view of the teachings of Tang et al.

Response to Arguments

Applicant's arguments filed April 28, 2004 have been fully considered but they are not persuasive. With respect to the obviousness rejection, Applicants argue that it would not have been obvious to take calibration readings in the method of Tang et al using sample (pool water) that does not contain an indicator. The Examiner disagrees. As pointed out in the rejection, Tang et al teach that the microprocessor stores known values corresponding to the known chemical concentrations for calibration (col. 6, lines 46-65). The reference goes on to state that these chemical concentration values are the values for pH and bromide, chemical which are already present in the sample prior to treating with the indicator. Tang et al teaches indicators such as DPD. The calibrations are stored based on what would be normal values of the substances normally found in pool water, such as bromide. Thus, it continues to be the position of the Examiner that it would have been obvious to one of ordinary skill in the art to take calibration measurements using normal pool water, with no indicator. The motivation to do so is to assure that any change in the pool water results from the indicator and not chemicals already present.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to

37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaToya I. Cross whose telephone number is 571-272-1256. The examiner can normally be reached on Monday-Friday 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Jill Warden
Supervisory Patent Examiner
Technology Center 1700